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MAY 20 2005

May 18, 2005

Dear Susan C. Alimenti,

My name is Sung Ho Park and I am writing you in regards to the Autofeeding pet dispenser you have reviewed.

I am sending this letter in order to alleviate a misunderstanding concerning my application.

I understand the reason for the rejection of my application is due to the similar nature of the dispensing discs attached to shaft 14 and dispensing discs 18', 26'. This was never contested and I fully agree with your finding. However, according to the diagrams I received with my claim rejection, Arentoft's dispensing disks are fixed to the inner side of the dispensing tube (Fig 2, 18' & 26'). In fact, Arentoft's dispensing disks 18', 26' must be fixed to the tube in order to function properly. My invention requires freely rotating dispensing discs that are not attached to the inner side of the tube 32'. I am providing a diagram to illustrate the difference between the two units.

I believe the reason for the rejection of my application may have been a misunderstanding. If it is possible for you to grant me 10 minutes of interview time I will be happy to show you the difference using prototypes I have developed. I humbly request you will review my application based on this letter.

Sincerely,

Sung Ho Park



Control #10/620.662
Art Unit 3644
Confirmation # 9571

U.S. Patent

May 8, 1990

Sheet 1 of 2

4,922,857

FIG. 1

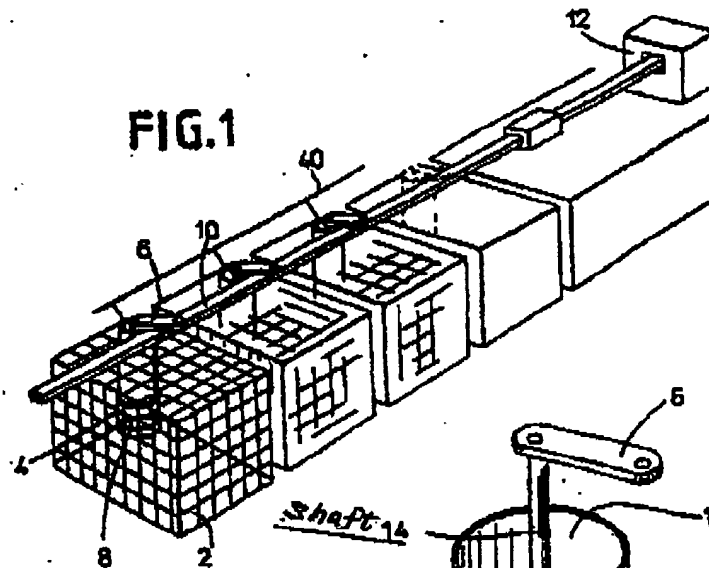
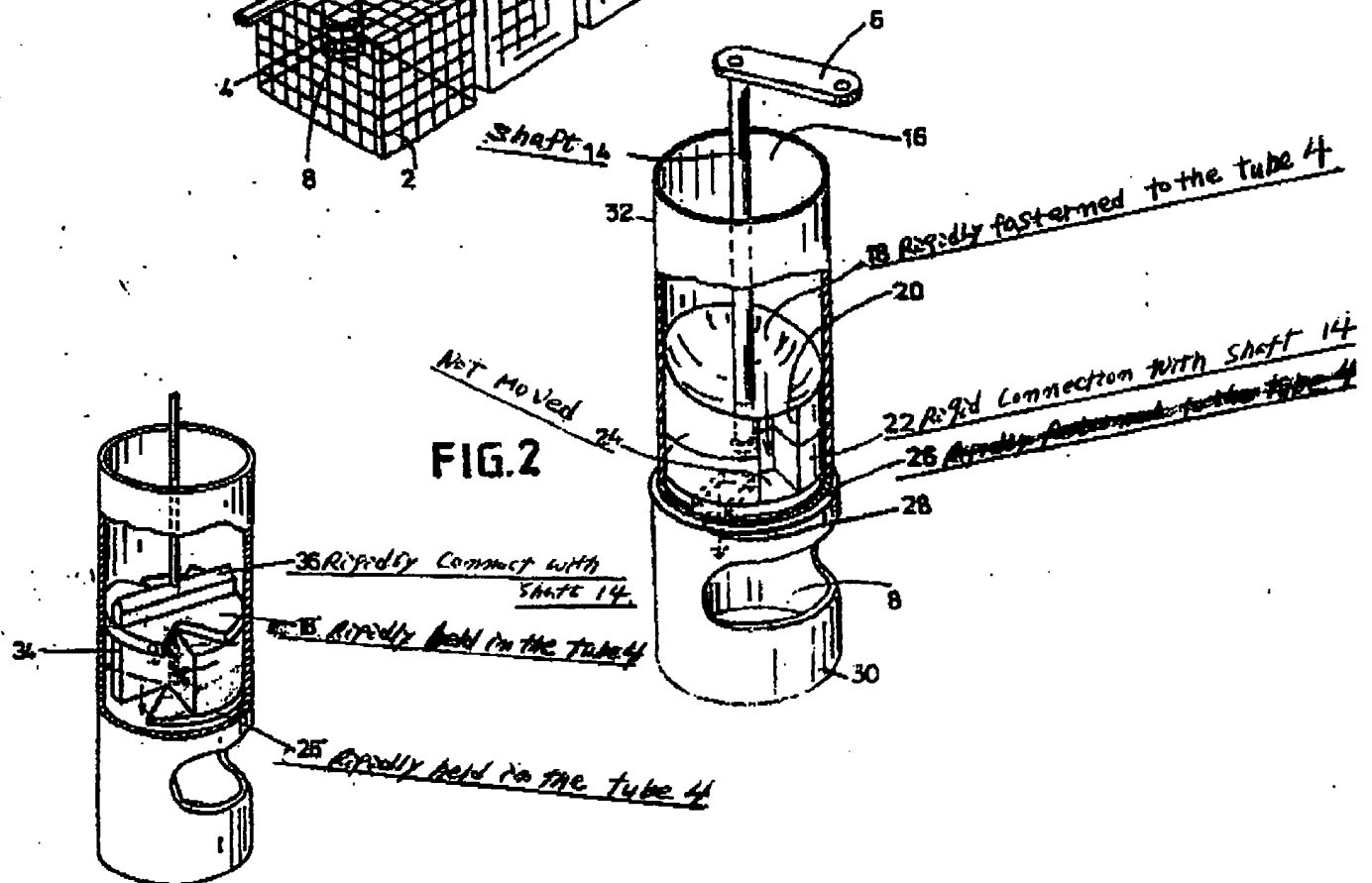


FIG. 2



4,922,851

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downwardly vaulted towards an outer, axial through passage 30, and, underneath the block member 18, a thick disc 22, which is in rigid connection with the shaft 14 and has an outer, axial through passage 24, which, by pivoting of the lever 6 may be pointed to and from a position just underneath the upper passage 20. Underneath the disc 22 is mounted another disc 26, which is rigidly fastened to the tube 4 and has an axial through passage 28, the cross sectional shape of which corresponds to that of the passages 20 and 24, but which is peripherally staggered from the upper passage 20 in such a manner that the passage 24 in the rotatable disc 22 by a pivoting forth and back of the lever 6 will be movable between opposed positions, in which the passage 24 will correspond with the passages 20 and 28, respectively.

In this manner there is provided a downlet valve, in which fodder portions are measured out in the passage 24 and are brought to fall freely down through the bottom passage 28 to the bottom of the tube 4 when the lever 6 is operated. It can be chosen to utilize a "normal function", by which the passage 24 is not moved into full debouching into the outlet passage, such that only a part of the fodder portion will be discharged; by an adjustment of the end positions of the actuator rod it is then, when desired, possible to produce an increase or a decrease of the fodder dose. Such general adjustments may be desirable during certain periods of time, e.g. just before the milking period.

The tube 4 may be designed telescopically with a lower end portion 30 provided with the hole 8 and consisting e.g. of stainless steel, and an upper pipe portion 32 which is secured to the cage in any suitable manner, whereby the height position of the eating opening 8 and the associated bottom of the said end portion 30 may be adjusted according to the requirements.

The fodder may be filled into the chambers 16 manually or by supply from an automatic conveyor, e.g. as known from hog feeding systems. The dosing out of the fodder portions could even be arranged to take place directly from such a conveyor system in the desired intermittent manner.

In the dispenser according to FIG. 2 the shaft 14 may be provided with radially projecting stirring pins down in the chamber 16, whereby possible formations of holding bridges in the fodder material may be counteracted. The pronounced concavity of the upper valve block member 18 towards the passage 20 results in the fodder sinking down all over the cross section of the chamber 16, so that no part of the material will stand still during the successive feeding operations and thus not become tainted.

FIGS. 3-5 show a preferred design of the valve in the dispenser. Here the upper valve block member is a thin disc 18' having two opposed notches 20', while the intermediate thick disc 22' has two notches 24' similar to the notches 20', but located next to each other, separated by a narrow wing portion 34. The lower valve disc 26' has but a single similar notch 28'. As in FIG. 2 the intermediate member 22' is connected with the shaft 14, while the two outer members 18' and 26' are rigidly held in the tube 4, with their respective notches 20' and 28' out of registry. On the top of the upper disc 18' is placed a cross block member 36, which is rigidly connected with the shaft 14, such that in operation it will be turned between the opposed positions shown in FIGS. 4 and 6, respectively.

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The valve here discussed is a double acting valve which will deliver a fodder portion as housed in either of the notch passages 24' through the bottom notch 28' each time the lever 6 is pivoted in either direction. In that respect the drawings are believed to be self-explanatory, and it just remains to be added that the upper cross member 36 will serve to scrape material rested on the flat top disc 18' into the respective opposite notches 20', such that the material cannot collect or be left resting on the top disc. This again results in the material sinking through the chamber 16 all over the cross section thereof.

The invention is not limited to the rotary arrangement of the valve system, since as already well known the intermediate valve member 22, 22' of a dosing outlet valve may be arranged to move in a linear manner.

It will be relevant to effect some 5-15 feedings per 24 hours, preferably 6-8 feedings, and more than the half of them should be effected during the evening and night hours.

The said conveyor system for supplying fodder to the dispensers is shown only very schematically at 40 in FIG. 1.

I claim:

1. A method of effecting feeding in far farms; primarily milk farms, wherein far bearing animals are located in respective ones of a plurality of cages having dry fodder containing feeding dispensers with means for supplying portions of fodder contained in said dispensers to the animals, comprising effecting an intermittent supply of fodder portions by means of said dispensers and said means for supplying so as to satisfy the normal feeding requirements of the animals, said intermittent supply providing 5-15 feedings per 24 with more than 50% of the feedings being effected during the evening and night hours between 5 p.m. and 7 a.m.

2. A method according to claim 1, wherein the dispensers are operable to effect outdosing of measured fodder portions, the cages are arranged in a row, and wherein the dispensers for the row of cages are operatively connected in common to a driving station adapted to actuate the dispensers at least five times per 24 hours and such that more than the half of these operations take place during the evening and night hours between 5 p.m. and 7 a.m.

3. A method according to claim 1, wherein said far bearing animals are milk.

4. A method according to claim 1, wherein said intermittent supply provides 6-8 feedings per 24 hours with more than 50% of the feedings being effected during the evening and night hours between 5 p.m. and 7 a.m.

5. A method according to claim 1, wherein said means for supplying includes valve means in the form of preadjusted volumetric dosing valves in each of the dispensers, said valves being operated so as to deliver but a single fodder dose by each feeding in said intermittent supply.

6. A method according to claim 1, wherein said means for supplying includes, in each of the dispensers, valve means controlled by a limited rotational movement of a valve shaft having a radial arm, the cages being arranged in a row, and wherein the radial arms of the dispensers are each pivotally connected to an activator rod which extends along the row of cages, all of the valve means being activated in response to the activator rod being displaced sufficiently to swing the radial arms forth and back through an angle which is less than or equal to 90 degrees, and whereby the activator

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Allowable Subject Matter

4. Claims 6, 8-10, 14 and 16-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments filed 09 December 2004 have been fully considered but they are not persuasive. The crux of applicant's arguments is that Arentoft does not anticipate the present invention because disks 18 and 26 are not "fixed" to the shaft 14, however the examiner respectfully disagrees. In order to properly examine this limitation one must turn to an accepted definition of "fixed" as defined by Merriam Webster's Collegiate Dictionary, 10th Ed. The verb form of the word "fix," as it appears to be used in claims 1 and 12, is "to make firm, stationary, or stable." Clearly discs 18 and 26 are stationary or stable on the shaft 14. If applicant intends to further define the fixed relationship between the discs and shaft, then the claims should reflect such a limitation. Therefore the examiner maintains that Arentoft discloses the discs and shaft in a fixed relationship.

Discs 18 and 26 are rigidly held in the Tube A

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(b).

A shortened statutory period for reply to this final action is set to expire **TWO MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 7, 11-12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Essex (US4,735,171) in view of Arentoft (US 4,922,857).

Essex discloses the claimed invention except the dispensing system is different. Essex's animal feeding device comprises a container or hopper 20 for holding animal feed, a circular pipe 26 attached below hopper 20, a dispenser 28 rotatably received in said pipe 26, a motor M, and dispensing spout 36. Essex utilizes a standard spiral auger system for dispensing the animal feed, however there are equivalent structures known in the art for performing the same function. Arentoft teaches an alternate automatic dispensing structure and system (Arentoft, Figures 3-6) comprising shaft 14 and two circular dispensing discs 18', 26' fixed to said shaft. Each of said discs comprises an arc recess, 20' and 28' respectively, said arc having a predetermined angle of about 90°, and are considered to be positioned "opposite with each other" (claim 1). Therefore, because these two feed dispensing systems were art recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to replace Essex's dispensing system with Arentoft's.

Regarding claim 2, the distance between dispensing discs 18' and 26' is considered to be about 1 1/2", however even if it were not, such a modification would only have involved a mere